

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A service providing system for correlating service to a virtual object which is data having spatial information, relating to shape and location, constructed on a computer corresponding to a specified space, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the specified space according to a positional relationship between a movable mobile member and the virtual object, comprising:

a storage device that associates object information related to the spatial information of the virtual object with service information specifying a service content, and that stores the object information and service information; and

a location-information acquisition device that obtains location information used for identifying a location of the mobile member,

~~wherein,~~ when it is determined according to the location information obtained by the location-information acquisition device and the object information stored in the storage device that the mobile member is disposed in an inside area of the specified space identified by the shape and location of the virtual object, service corresponding to the specified space ~~is being provided according to the service information stored in the storage device.~~

the object information including information, the information providing a time condition for construction of the virtual object.

2. (Previously Presented) A service providing system according to claim 1, the mobile member and a management terminal that manages the specified space being connected in a communication-allowed manner;

the mobile member includes the location-information acquisition device, and sends the location information obtained by the location-information acquisition device to the management terminal; and

the management terminal having the storage device, and when the management terminal receives the location information, the management terminal determines, according to the received location information and the object information stored in the storage device, whether the mobile member is disposed in the inside area of the specified space identified by the shape and location of the virtual object.

3. (Previously Presented) A service providing system according to claim 1, the mobile member and a management terminal that manages the virtual object being connected in a communication-allowed manner;

the management terminal includes the storage device, and sends the object information stored in the storage device to the mobile member; and

the mobile member includes the location-information acquisition device, and when the mobile member receives the object information, the mobile member determines, according to the location information obtained by the location-information acquisition device and the received object information, whether the mobile member is disposed in the inside area of the specified space identified by the shape and location of the virtual object.

4. (Previously Presented) A service providing system according to claim 2, wherein, when the result of the determination indicates that the mobile member is disposed in the inside area of the specified space identified by the shape and location of the virtual object, the management terminal provides service corresponding to the virtual object based on the service information stored in the storage device.

5. (Previously Presented) A service providing system according to claim 2,

the management terminal sending the service information stored in the storage device to the mobile member in advance, and

when the result of the determination indicates that the mobile member is disposed in the inside area of the specified space identified by the shape and location of the virtual object, the mobile member provides service corresponding to the specified space based on the received service information.

6. (Previously Presented) A service providing system according to claim 2, the management terminal further comprising:

an input device that performs an input related to at least one of generation, deletion, and update of the object information; and

an object-information processing device that generates, deletes or updates the object information according to the content of the input performed by the input device.

7. (Previously Presented) A service providing system according to claim 1, the service information being operation information specifying a content of an operation of the mobile member or another apparatus, and

when it is determined that the mobile member is disposed in the inside area of the specified space identified by the shape and location of the virtual object, the mobile member or the another apparatus is operated based on the operation information corresponding to the specified space stored in the storage device.

8. (Previously Presented) A service providing system according to claim 1, the service information specifying a content of service in which media information related to at least one of characters, images, and video is provided for the mobile member, and

when it is determined that the mobile member is disposed in the inside area of the specified space identified by the shape and location of the virtual object, the media

information is provided for the mobile member based on the service information corresponding to the specified space, stored in the storage device.

9. (Previously Presented) A service providing system according to claim 1, the service information specifying a content of service in which notice information related to at least one of a notice and guidance information related to a guidance is provided for the mobile member, and

when it is determined that the mobile member is disposed in the inside area of the specified space identified by the shape and location of the virtual object, the notice information and the guidance information are provided for the mobile member based on the service information corresponding to the specified space, stored in the storage device.

10. (Previously Presented) A service providing system according to claim 1, the mobile member being a portable terminal.

11. (Currently Amended) A service providing system for correlating service to a virtual object which is data having spatial information, relating to shape and location, constructed on a computer corresponding to a specified space, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the specified space based on a positional relationship between a movable mobile member and the specified space, comprising:

a storage device that associates object information related to the virtual object with operation information specifying a content of an operation of the mobile member or another apparatus, and that stores the object information and the operation information,

~~wherein,~~ when it is determined, according to the object information stored in the storage device, that the positional relationship between the mobile member and the specified space satisfies a predetermined condition, the mobile member or the another

apparatus ~~is being~~ operated based on the operation information corresponding to the specified space stored in the storage ~~device~~.device,

the object information including information, the information providing a time condition for construction of the virtual object.

12. (Currently Amended) A service providing system for correlating service to a virtual object which is having spatial information, relating to shape and location, constructed on a computer corresponding to a specified space, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the specified space according to a positional relationship between a movable mobile member and the virtual object, comprising:

a storage device that associates object information related to the virtual object with service information specifying the content of service, and that stores the object information and service information;

an input device that performs an input related to at least one of generation, deletion, and update of the object information; and

an object-information processing device that generates, deletes, or updates the object information according to the content of the input performed by the input device,

~~wherein,~~ when it is determined according to the object information stored in the storage device that the positional relationship between the mobile member and the specified space satisfies a predetermined condition, the service corresponding to the specified space ~~is being~~ provided based on the service information stored in the storage ~~device; and device,~~

~~further comprising an input device that performs an input related to at least one of generation, deletion, and update of the object information; and~~

~~an object information processing device that generates, deletes, or updates the object information according to the content of the input performed by the input device.~~

the object information including information, the information providing a time condition for construction of the virtual object.

13. (Currently Amended) A terminal connected to the mobile member used in a service providing system according to claim 2 in a communication-allowed manner, comprising a storage device,

wherein, when the terminal receives the location information, the terminal determines, according to the received location information and the object information stored in the storage device, whether the mobile member is being disposed in the inside area of the specified space identified by the shape and location information of the virtual object.

14. (Currently Amended) A mobile member connected to the management terminal used in a service providing system according to claim 3 in a communication-allowed manner, comprising a location-information acquisition device,

wherein, when the mobile member receives the object information, the mobile member determines, according to the location information obtained by the location-information acquisition device and the received object information, whether the mobile member is being disposed in the inside area of the specified space identified by the shape and location of the virtual object.

15. (Currently Amended) A service providing program for correlating service to a virtual object which is data having a spatial information, relating to shape and location, constructed on a computer corresponding to a specified space, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the specified space according to a positional relationship between a movable mobile member and the virtual object, the program making a computer, which is capable of using a storage

device that associates and stores object information related to the shape and location of the virtual object with service information specifying a service content, and a location-information acquisition device that obtains location information used for identifying the location of the mobile member, execute processing in which:

when it is determined according to the location information obtained by the location-information acquisition device and the object information stored in the storage device that the mobile member is disposed in the inside area of the specified space identified by the shape and location of the virtual object, the object information including information, the information providing a time condition for construction of the virtual object, the service corresponding to the specified space ~~is being~~ provided based on the service information and the information stored in the storage device.

16. (Currently Amended) A service providing program for correlating service to a virtual object which is data having a spatial information, relating to shape and location, constructed on a computer corresponding to a specified space, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the specified space according to a positional relationship between a movable mobile member and the specified space, the program making a computer, which is capable of using a storage device that associates and stores object information related to the virtual object with operation information specifying a content of an operation of the mobile member or another apparatus, execute processing in which:

when it is determined according to the object information stored in the storage device that the positional relationship between the mobile member and the specified space satisfies a predetermined condition, the object information including information, the information providing a time condition for construction of the virtual object, the mobile

member or the another apparatus is operated based on the operation information corresponding to the specified space and the information stored in the storage device.

17. (Currently Amended) A service providing program for correlating service to a virtual object having spatial information, relating to shape and location, constructed on a computer corresponding to a specified space, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the specified space according to a positional relationship between a movable mobile member and the specified space, the program making a computer, which is capable of using a storage device that associates and stores object information related to the virtual object with service information specifying the content of service, execute:

processing in which, when it is determined according to the object information stored in the storage device that the positional relationship between the mobile member and the specified space satisfies a predetermined condition, the object information including information, the information providing a time condition for construction of the virtual object, the service corresponding to the specified space is provided based on the service information and the information stored in the storage device, and

processing implemented as an input device that performs an input related to at least one of generation, deletion, and update of the object information, and object-information processing device that generates, deletes, or updates the object information according to a content of the input performed by the input device.

18. (Currently Amended) A service providing method for correlating service to a virtual object having spatial information, relating to shape and location, constructed on a computer corresponding to a specified space, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the specified



space based on a positional relationship between a movable mobile member and the specified space, comprising:

associating and storing object information related to the shape and location of the virtual object with service information specifying a service content, the object information including information, the information providing a time condition for construction of the virtual object; and

obtaining location information used for identifying the location of the mobile member; and

when it is determined, according to the obtained location information and the stored object information, that the mobile member is disposed in the inside area of the specified space identified by the shape and location of the virtual object, providing service corresponding to the specified space according to the stored service information and the stored information.

19. (Currently Amended) A service providing method for correlating service to a virtual object having spatial information, relating to shape and location, constructed on a computer corresponding to a specified space, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the specified space according to a positional relationship between a movable mobile member and the specified space, comprising:

associating and storing object information related to the virtual object with operation information specifying the content of an operation of the mobile member or another apparatus, the object information including information, the information providing a time condition for construction of the virtual object; and

when it is determined according to the stored object information that the positional relationship between the mobile member and the specified space satisfies a

predetermined condition, the mobile member or the another apparatus is operated based on the stored operation information corresponding to the specified space and the stored information.

20. (Currently Amended) A service providing method for correlating service to a virtual object which is data having spatial information, relating to shape and location, constructed on a computer corresponding to a specified space, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the specified space according to a positional relationship between a movable mobile member and the specified space, comprising:

associating and storing object information related to the virtual object with service information specifying the content of service, the object information including information, the information providing a time condition for construction of the virtual object;  
and

when it is determined according to the stored object information that the positional relationship between the mobile member and the specified space satisfies a predetermined condition, providing the service corresponding to the specified space based on the stored service information and the information;

performing an input related to at least one of generation, deletion, and update of the object information; and

at least one of generating, deleting, and updating the object information based on the content of the performed input.

21. (Previously Presented) A service providing system according to claim 1, the system further comprising:

an input device that generates the data for the virtual object, the input device transmitting the data to the storage device, the storage device registering the data and associating the object information with the service information.

22. (Previously Presented) A service providing system according to claim 11, the system further comprising:

an input device that generates the data for the virtual object, the input device transmitting the data to the storage device, the storage device registering the data and associating the object information with the service information.

23. (Previously Presented) A service providing program according to claim 15, the processing including implementing an input device that generates the object information and transmits the object information to the storage device.

24. (Previously Presented) A service providing program according to claim 16, the processing including implementing an input device that generates the object information and transmits the object information to the storage device.

25. (Previously Presented) A service providing method according to claim 18, the method further comprising:

generating data for the virtual object and transmitting the data to a storage device for registering.

26. (Previously Presented) A service providing method according to claim 19, the method further comprising:

generating data for the virtual object and transmitting the data to a storage device for registering.

27. (New) A service providing system for correlating service to a virtual object which is having spatial information, relating to shape and location, constructed on a computer corresponding to a specified space, for disposing the virtual object in a virtual space

associated with an actual space, and for providing service corresponding to the specified space according to a positional relationship between a movable mobile member and the virtual object, comprising:

a storage device that associates object information related to the virtual object with service information specifying the content of service, and that stores the object information and service information;

an input device that performs an input related to at least one of generation, deletion, and update of at least one of the object information and the service information related to the virtual object; and

an object-information processing device that generates, deletes, or updates the at least one of the object information and the service information related to the virtual object according to the content of the input performed by the input device;

when it is determined according to the object information stored in the storage device that the positional relationship between the mobile member and the specified space satisfies a predetermined condition, the service corresponding to the specified space is provided based on the service information stored in the storage device, and

when it is determined according to the object information stored in the storage device that the positional relationship between the input device and the specified space satisfies a predetermined condition, the object-information processing device performing at least one of generation, deletion and update of the at least one of the object information and the service information according to the content of the input performed by the input device.

28. (New) A service providing program for correlating service to a virtual object which is data having a spatial information, relating to shape and location, constructed on a computer corresponding to a specified space, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the specified

space according to a positional relationship between a movable mobile member and the virtual object, the program making a computer, which is capable of using a storage device that associates and stores object information related to the shape and location of the virtual object with service information specifying a service content, and a location-information acquisition device that obtains location information used for identifying the location of the mobile member, execute processing in which:

processing implemented as an input device that performs an input related to at least one of generation, deletion, and update of at least one of the object information and the service information, and object-information processing device that generates, deletes, or updates the at least one of the object information and the service information according to a content of the input performed by the input device,

when it is determined according to the location information obtained by the location-information acquisition device and the object information stored in the storage device that the mobile member is disposed in the inside area of the specified space identified by the shape and location of the virtual object, the service corresponding to the specified space being provided based on the service information stored in the storage device, and

when it is determined according to the object information stored in the storage device that the positional relationship between the input device and the specified space satisfies a predetermined condition, performing at least one of generation, deletion and update of the at least one of the object information and the service information according to the content of the input performed by the input device.

29. (New) A service providing method for correlating service to a virtual object having spatial information, relating to shape and location, constructed on a computer corresponding to a specified space, for disposing the virtual object in a virtual space associated with an actual space, and for providing service corresponding to the specified

space based on a positional relationship between a movable mobile member and the specified space, comprising:

associating and storing object information related to the shape and location of the virtual object with service information specifying a service content; and

obtaining location information used for identifying the location of the mobile member; and

processing implemented as an input device that performs an input related to at least one of generation, deletion, and update of at least one of the object information and the service information, and object-information processing device that generates, deletes, or updates the at least one of the object information and the service information according to a content of the input performed by the input device,

when it is determined, according to the obtained location information and the stored object information, that the mobile member is disposed in the inside area of the specified space identified by the shape and location of the virtual object, providing service corresponding to the specified space according to the stored service information, and

when it is determined according to the object information stored in the storage device that the positional relationship between the input device and the specified space satisfies a predetermined condition, performing at least one of generation, deletion and update of the at least one of the object information and the service information according to the content of the input performed by the input device.